

1           1. An isolated nucleic acid molecule selected from  
2 the group consisting of:

3           a) a nucleic acid molecule comprising a nucleotide  
4 sequence that is at least 65% identical to the nucleotide  
5 sequence of SEQ ID NO:1 or SEQ ID NO:3, or a complement  
6 thereof;

7           b) a nucleic acid molecule comprising a fragment of  
8 at least 300 nucleotides of the nucleotide sequence of SEQ  
9 ID NO:1 or SEQ ID NO:3, or a complement thereof;

10          c) a nucleic acid molecule that encodes a  
11 polypeptide comprising the amino acid sequence of SEQ ID  
12 NO:2;

13          d) a nucleic acid molecule that encodes a fragment of  
14 a polypeptide comprising the amino acid sequence of SEQ ID  
15 NO:2, wherein the fragment comprises at least 15 contiguous  
16 amino acid residues of SEQ ID NO:2; and

17          e) a nucleic acid molecule that encodes a naturally  
18 occurring allelic variant of a polypeptide comprising the  
19 amino acid sequence of SEQ ID NO:2, wherein the nucleic acid  
20 molecule hybridizes to a nucleic acid molecule comprising  
21 SEQ ID NO:1 or SEQ ID NO:3 under stringent conditions.

1           2. The isolated nucleic acid molecule of claim 1,  
2 which is selected from the group consisting of:

3           a) a nucleic acid molecule comprising the nucleotide  
4 sequence of SEQ ID NO:1 or SEQ ID NO:3 or a complement  
5 thereof; and

6           b) a nucleic acid molecule that encodes a polypeptide  
7 comprising the amino acid sequence of SEQ ID NO:2.

1           3. The nucleic acid molecule of claim 1, further  
2 comprising vector nucleic acid sequences.

1 4. The nucleic acid molecule of claim 1, further  
2 comprising nucleic acid sequences encoding a heterologous  
3 polypeptide.

1 5. A host cell containing the nucleic acid molecule  
2 of claim 1.

1 6. The host cell of claim 4, which is a mammalian  
2 host cell.

1 7. A non-human mammalian host cell containing the  
2 nucleic acid molecule of claim 1.

1 8. An isolated polypeptide selected from the group  
2 consisting of:

3 a) a fragment of a polypeptide comprising the amino  
4 acid sequence of SEQ ID NO:2, wherein the fragment comprises  
5 at least 15 contiguous amino acids of SEQ ID NO:2;

6 b) a naturally occurring allelic variant of a  
7 polypeptide comprising the amino acid sequence of SEQ ID  
8 NO:2, wherein the polypeptide is encoded by a nucleic acid  
9 molecule that hybridizes to a nucleic acid molecule  
10 comprising SEQ ID NO:1 or SEQ ID NO:3 under stringent  
11 conditions;

12 c) a polypeptide that is encoded by a nucleic acid  
13 molecule comprising a nucleotide sequence that is at least  
14 60% identical to a nucleic acid molecule comprising the  
15 nucleotide sequence of SEQ ID NO:1 or SEQ ID NO:3.

1 9. The isolated polypeptide of claim 8, comprising  
2 the amino acid sequence of SEQ ID NO:2.

1 10. The polypeptide of claim 8, further comprising  
2 heterologous amino acid sequences.

1 11. An antibody that selectively binds to a  
2 polypeptide of claim 8.

1 12. A method for producing a polypeptide selected from  
2 the group consisting of:

3 a) a polypeptide comprising the amino acid sequence  
4 of SEQ ID NO:2;

5 b) a fragment of a polypeptide comprising the amino  
6 acid sequence of SEQ ID NO:2, wherein the fragment comprises  
7 at least 15 contiguous amino acids of SEQ ID NO:2; and

8 c) a naturally occurring allelic variant of a  
9 polypeptide comprising the amino acid sequence of SEQ ID  
10 NO:2, wherein the polypeptide is encoded by a nucleic acid  
11 molecule that hybridizes to a nucleic acid molecule  
12 comprising SEQ ID NO:1 or SEQ ID NO:3 under stringent  
13 conditions;

14 the method comprising culturing the host cell of  
15 claim 5 under conditions in which the nucleic acid molecule  
16 is expressed.

1 13. The isolated polypeptide of claim 8 comprising the  
2 amino acid sequence of SEQ ID NO:2.

1 14. A method for detecting the presence of a  
2 polypeptide of claim 8 in a sample, comprising:

3 a) contacting the sample with a compound that  
4 selectively binds to a polypeptide of claim 8; and

5 b) determining whether the compound binds to the  
6 polypeptide in the sample.

1 15. The method of claim 14, wherein the compound that  
2 binds to the polypeptide is an antibody.

1 16. A kit comprising a compound that selectively binds  
2 to a polypeptide of claim 8 and instructions for use.

1 17. A method for detecting the presence of a nucleic  
2 acid molecule of claim 1 in a sample, comprising the steps  
3 of:

4 a) contacting the sample with a nucleic acid probe or  
5 primer that selectively hybridizes to the nucleic acid  
6 molecule; and

7 b) determining whether the nucleic acid probe or  
8 primer binds to a nucleic acid molecule in the sample.

1 18. The method of claim 17, wherein the sample  
2 comprises mRNA molecules and is contacted with a nucleic  
3 acid probe.

1 19. A kit comprising a compound that selectively  
2 hybridizes to a nucleic acid molecule of claim 1 and  
3 instructions for use.

1 20. A method for identifying a compound that binds to  
2 a polypeptide of claim 8, comprising the steps of:

3 a) contacting a polypeptide of claim 8, or a cell  
4 expressing a polypeptide of claim 8, with a test compound;  
5 and

6 b) determining whether the polypeptide binds to the  
7 test compound.

1 21. The method of claim 20, wherein the binding of the  
2 test compound to the polypeptide is detected by a method  
3 selected from the group consisting of:

4 a) detection of binding by direct detecting of test  
5 compound/polypeptide binding; and

6 b) detection of binding using a competition binding  
7 assay.

1 22. A method for modulating the activity of a  
2 polypeptide of claim 8, the method comprising contacting a  
3 polypeptide of claim 8 or a cell expressing a polypeptide of  
4 claim 8 with a compound that binds to the polypeptide in a  
5 sufficient concentration to modulate the activity of the  
6 polypeptide.

1 23. A method for identifying a compound that modulates  
2 the activity of a polypeptide of claim 8, comprising:

3 a) contacting a polypeptide of claim 8 with a test  
4 compound; and

5 b) determining the effect of the test compound on the  
6 activity of the polypeptide to thereby identify a compound  
7 that modulates the activity of the polypeptide.

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